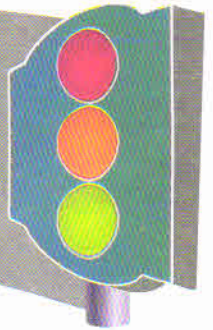


# 1

# Numbers up to 200



## Route Map



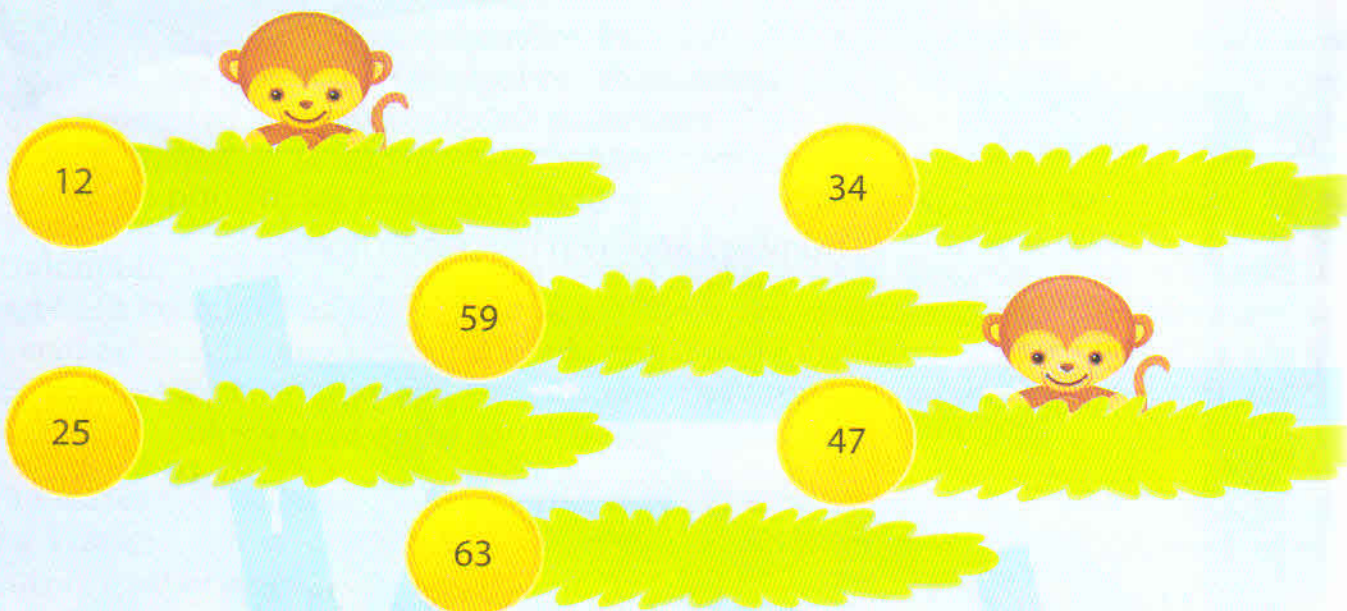
Karl is 100 steps away from his house. Some numbers are missing on his way. Write the missing numbers and help him reach home.

1					6				
		13						19	
	22						28		
		33			36				
				45					50
51						57			
			64					69	
	72				76				
81					86				
			94				99		





1. Look at the numbers on the previous page and tick (✓) the greatest and cross (✕) the smallest number.
2. Write the number names.



3. Write the expanded form.

a.  $55 =$

b.  $99 =$

c.  $68 =$

d.  $76 =$

4. Fill in the blanks.

a. The number just after 28 is ..... b. .... is between 49 and 51.

c. .... comes before 82. d. .... is between 87 and 89.

e. .... comes after 69. f. The number just before 99 is .....



### Road Ahead

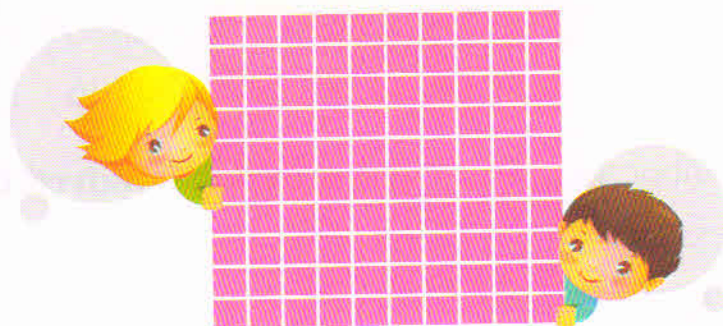
You will learn about:

- ♦ building numbers up to 200
- ♦ comparing numbers
- ♦ even and odd numbers
- ♦ expanded notation
- ♦ ordering of numbers
- ♦ ordinal numbers.
- ♦ place value



# Building Numbers up to 200

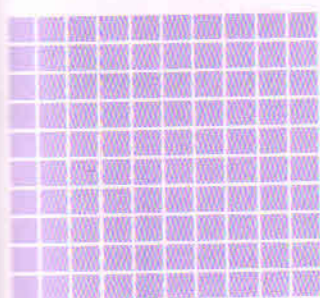
Look at the picture.



This is a grid with 100 blocks. We can also say that 1 grid = 100.

Each strip of the grid = 10 blocks .

Now observe the pictures carefully. It represents a number.



**Hundred**

**Tens**

**Ones**

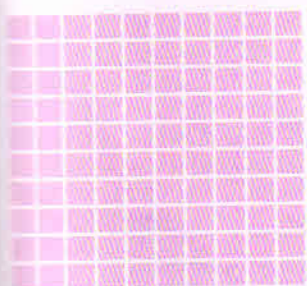
In the picture, we have 1 hundred, 2 tens and 4 ones.

We write it as

Hundred (H)	Tens (T)	Ones (O)	
1	2	4	= 124

Hence, we write the number as **124** and read it as **one hundred twenty-four**.

Consider another example.



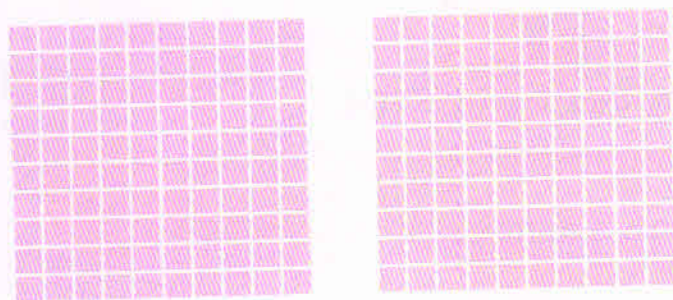
Here, we have 1 hundred, 3 tens and 6 ones.



We write it as

Hundred (H)	Tens (T)	Ones (O)	
1	3	6	= 136

Hence, we write the number as **136** and read it as **one hundred thirty-six**.  
Look at the following example.



In the above example, there are no digits at tens and ones place. Hence, we assume that 0 is present at ones and tens place.

Hundreds (H)	Tens (T)	Ones (O)	
2	0	0	= 200

Therefore, we write the number as **200** and read it as **two hundred**.

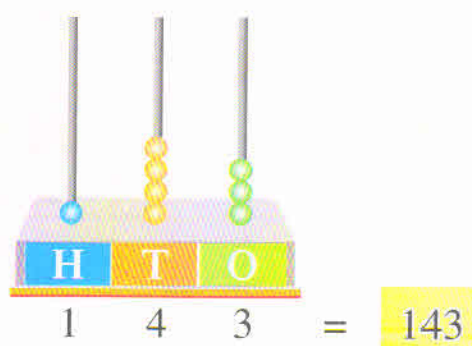
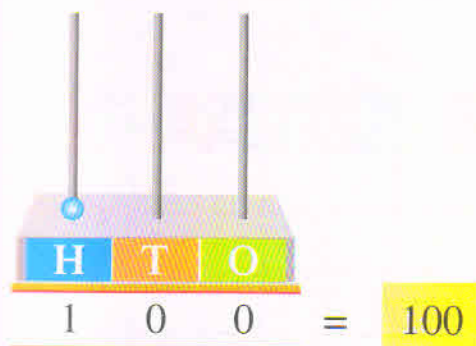
### Exercise 1.1

Fill in the .

- a. 67 =  tens  ones
- b. 198 =  hundred  tens  ones
- c. 108 =  hundred  tens  ones
- d. 43 =  tens  ones



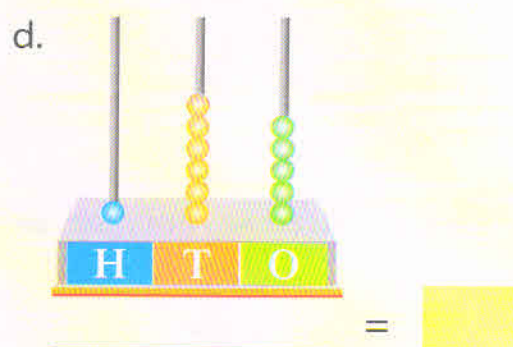
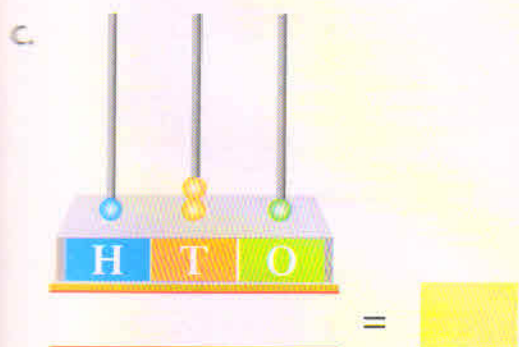
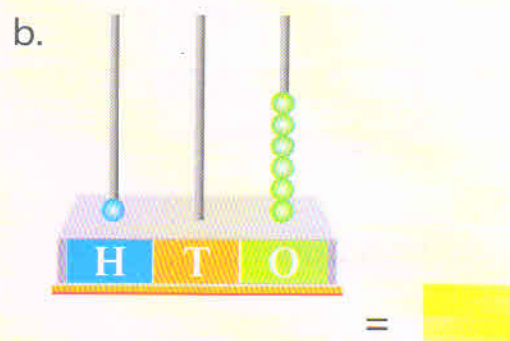
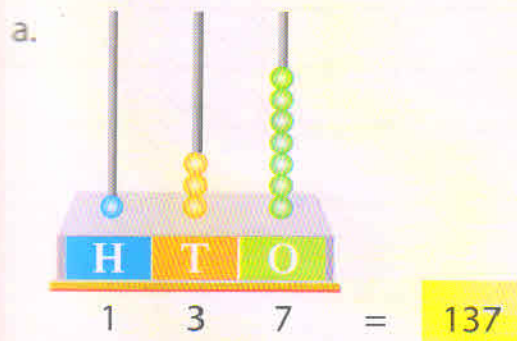
In the previous class, we have learnt to write 2-digit numbers using an abacus. Here, we will learn to write 3-digit numbers using an abacus. Look at the examples. We have represented numbers 100 and 143 on the abacus.



### Mental Maths

FA

Write the numbers shown on each abacus. One has been done for you.



### Teacher's Tip

Get an abacus in the class. Demonstrate the students, how to form numbers on it. Ask the children to practise the same by representing different numbers.



### Exercise 1.2

1. Complete the counting.

[illegible]

2. Write the numbers.

- a. One hundred eighty-six



- b. One hundred ten



- c. One hundred seventy-seven



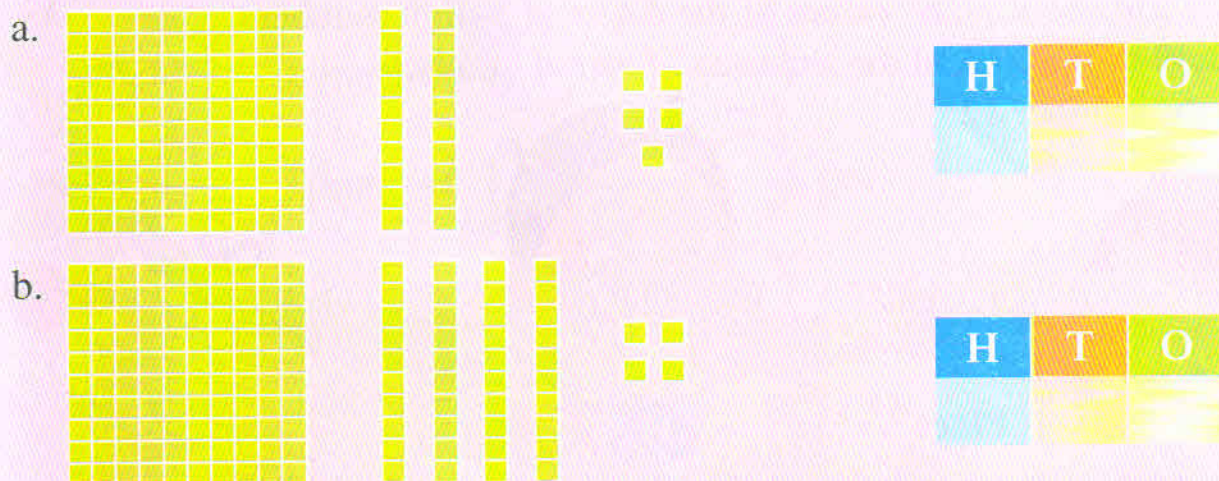
- d. One hundred fifty

==

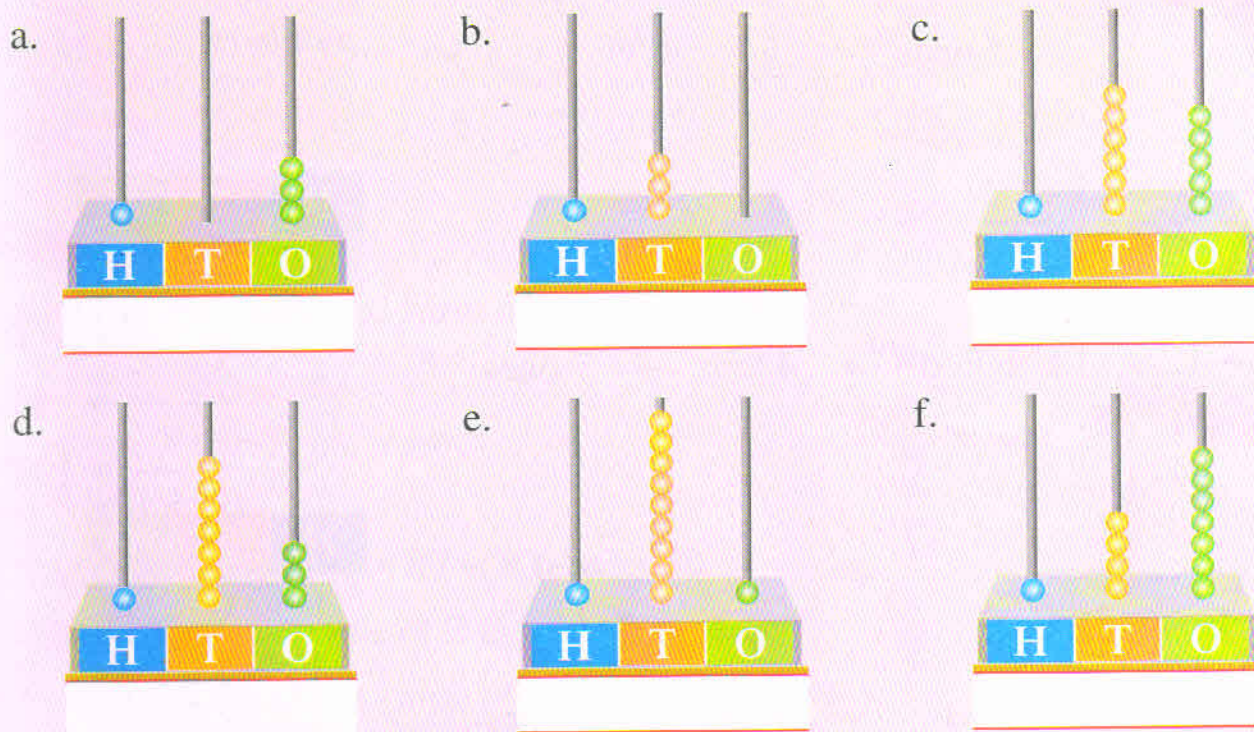
- e. Two hundred



3. Look at the pictures and write the numbers.



4. Observe and write the numbers below the abaci.



5. Write the numbers that come just after.

a. 109 ..... b. 130 ..... c. 187 ..... d. 199 .....

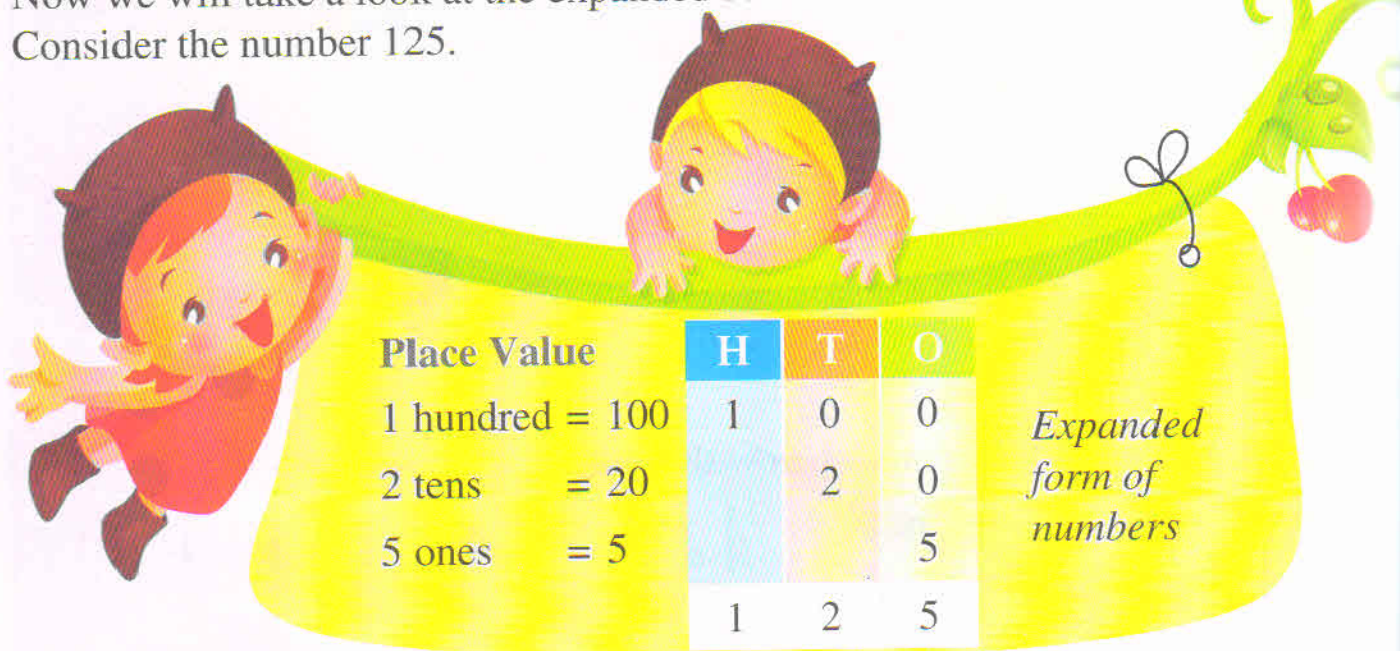
6. Write the numbers that come just before.

a. .... 112 b. .... 106 c. .... 170 d. .... 189



## Expanded Notation

We have learnt about place values of the digits of 3-digit numbers. Now we will take a look at the expanded form of numbers. Consider the number 125.



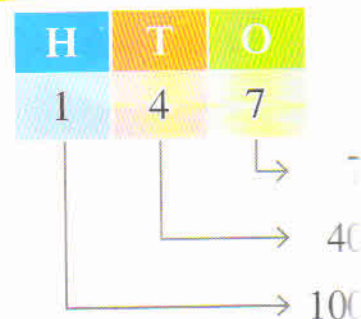
Place Value	H	T	O
1 hundred = 100	1	0	0
2 tens = 20		2	0
5 ones = 5			5
	1	2	5

*Expanded form of numbers*



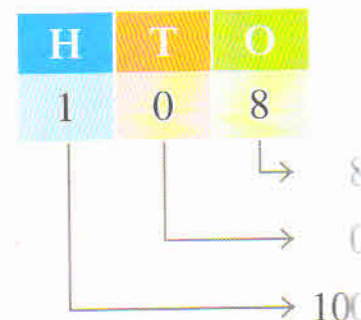
$$100 + 40 + 7$$

$$1 \text{ hundred} + 4 \text{ tens} + 7 \text{ ones}$$



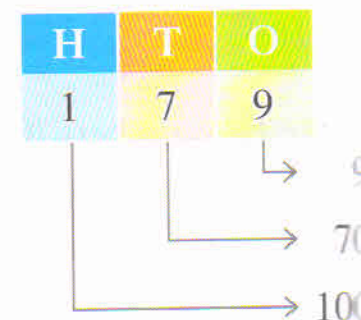
$$100 + 0 + 8$$

$$1 \text{ hundred} + 0 \text{ tens} + 8 \text{ ones}$$



$$100 + 70 + 9$$

$$1 \text{ hundred} + 7 \text{ tens} + 9 \text{ ones}$$







## Mental Maths



a. 146 =  hundred  tens  ones

b. 133 =  hundred  tens  ones

c. 179 =  hundred  tens  ones

d. 108 =  hundred  tens  ones

e. 121 =  hundred  tens  ones

f. 156 =  hundred  tens  ones

## Place Value

Let us write the expanded form of the number 87.

$$\begin{array}{rcccl} 87 & = & 80 & + & 7 \\ & & 8 \text{ tens} & & 7 \text{ ones} \end{array}$$

Here, 8 tens = 80.

So, the place value of 8 in 87 is **8 tens** or **80**.

Similarly, the place value of 7 in 87 is **7 ones** or **7**.

Let us find out the place value of some more numbers.

**Example 1:** Write the place values of the digits of the number 64.

**Solution:**

$$\begin{array}{rcccl} 64 \text{ in expanded form} & = & 60 & + & 4 \\ & & 6 \text{ tens} & & 4 \text{ ones} \end{array}$$

The place value of 6 in 64 is **6 tens** or **60**.

The place value of 4 in 64 is **4 ones** or **4**.



### Remember

We can also use an abacus to find out the place values of the digits of a number.



**Example 2:** Write the place values of the digits of the number 162.

**Solution:** 162 in expanded form =  $100 + 60 + 2$   
1 hundred + 6 tens + 2 ones

The place value of 1 in 162 is **1 hundred** or **100**.

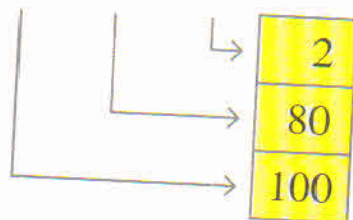
The place value of 6 in 162 is **6 tens** or **60**.

The place value of 2 in 162 is **2 ones** or **2**.

**Example 3:** Write the place values of the digits in the number 182.

**Solution:** 182 in expanded form =  $100 + 80 + 2$

We can also write the numbers in expanded form as given here.



The place value of 1 in 182 is **1 hundred** or **100**.

The place value of 8 in 182 is **8 tens** or **80**.

The place value of 2 in 182 is **2 ones** or **2**.



**Alert**

Do not get confused by the place value of 8 in 80 and never 8.

1 8 2

Place Value  
8 ×



### Mental Maths

Write the place value of 7.

a. 137

b. 173

### Exercise 1.3

1. Write the numbers in expanded form.

a. 126 =

b. 133 =



c.  $181 =$

d.  $145 =$

e.  $197 =$

2. Read the expanded form and write the numbers. One has been done for you.

a. 1 hundred 6 tens and 2 ones =  $\overset{1}{\phantom{00}}\overset{6}{\phantom{00}}\overset{2}{\phantom{00}}$

b. 1 hundred 8 tens and 5 ones = .....

c. 1 hundred 7 tens and 6 ones = .....

d. 9 tens and 8 ones = .....

e. 1 hundred 0 tens and 0 ones = .....

3. Write the place values of the coloured digits. One has been done for you.

a.  $1\overset{\text{white}}{7}\overset{\text{white}}{9} = \overset{\text{white}}{70}$

b.  $9\overset{\text{white}}{2} = \overset{\text{white}}{\phantom{00}}$

c.  $1\overset{\text{white}}{4}\overset{\text{white}}{0} = \overset{\text{white}}{\phantom{00}}$

d.  $1\overset{\text{white}}{0}\overset{\text{white}}{5} = \overset{\text{white}}{\phantom{00}}$

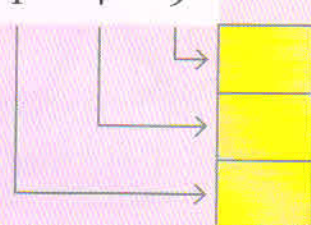
e.  $1\overset{\text{white}}{9}\overset{\text{white}}{9} = \overset{\text{white}}{\phantom{00}}$

f.  $2\overset{\text{white}}{0}\overset{\text{white}}{0} = \overset{\text{white}}{\phantom{00}}$

4. Write the place values in the given boxes.

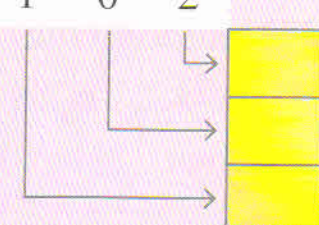
a. 

H	T	O
1	4	9

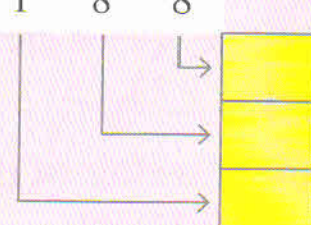
b. 

H	T	O
1	0	2

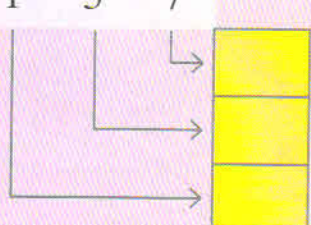
c. 

H	T	O
1	8	8

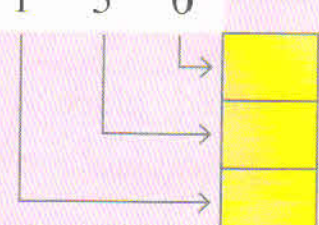
d. 

H	T	O
1	5	7


e. 

H	T	O
1	5	0

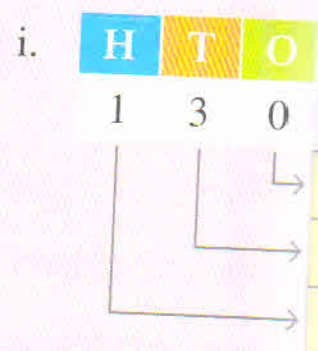
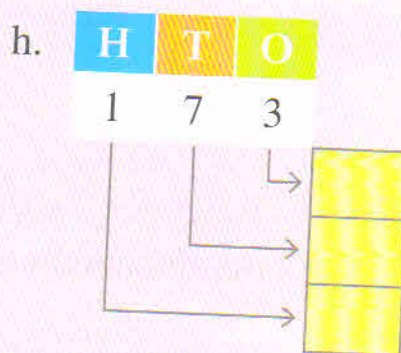
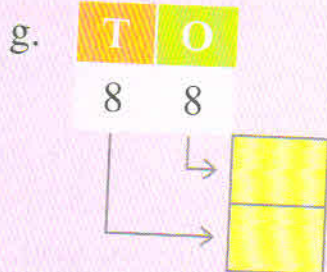
  


f. 

H	T	O
1	0	0





## Comparing Numbers

### Different number of digits

The number with more digits is greater than the number with fewer digits. Let us understand with the help of examples.

**Example 1:** Compare 49 and 132.

**Solution:** 132 has 3 digits and 49 has 2 digits. 3 is greater than 2. Therefore, 132 is greater than 49 and we write it as  $132 > 49$ .



**Example 2:** Compare 143 and 73.

**Solution:** 143 has 3 digits and 73 has 2 digits. Therefore, 143 is greater than 73 and we write it as  $143 > 73$ .



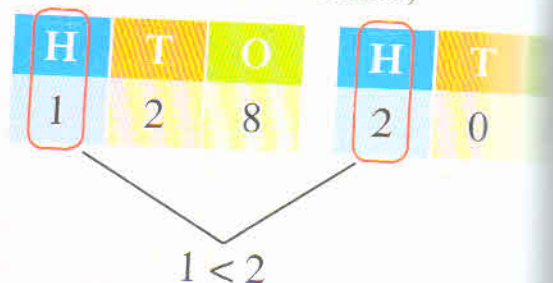
### Same number of digits

**Example 1:** Compare 128 and 200.

**Solution:** When the number of digits in both the numbers are the same, we start the comparison with the digits in the hundreds place.

200 has a greater digit in the hundreds place.

Therefore, 200 is greater than 128 and we write it as  $200 > 128$ .

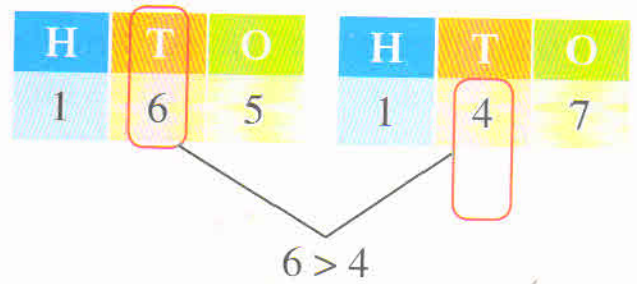




**Example 2:** Compare 165 and 147.

**Solution:** Here, the digits in the hundreds place is the same. So, we will compare the digits in the tens place, that is, 6 and 4.

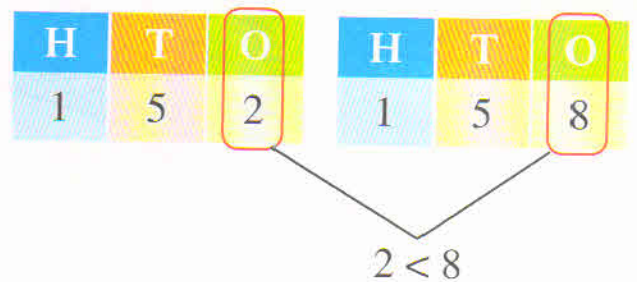
As 147 has a smaller digit in tens place, therefore, 147 is smaller than 165 and we write it as  $147 < 165$ .



**Example 3:** Compare 152 and 158.

**Solution:** Here, the digits in the hundreds and tens place are the same. So, we will compare the digits in the ones place, that is, 2 and 8.

158 has greater digit at ones place, therefore, 158 is greater than 152 and we write it as  $158 > 152$ .

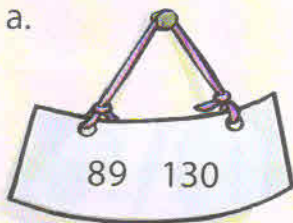


### Mental Maths

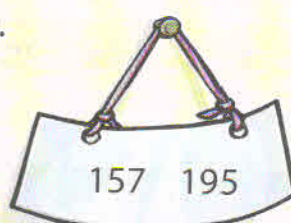
FA

1. Compare 187 and 142. .... > .....
2. Compare 167 and 161. .... < .....
3. Circle the greater number.

a.



b.



c.

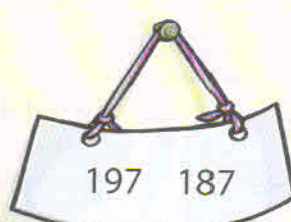


4. Circle the smaller number.

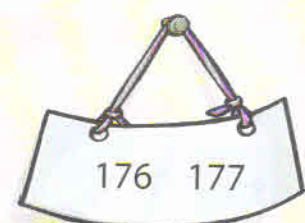
a.



b.



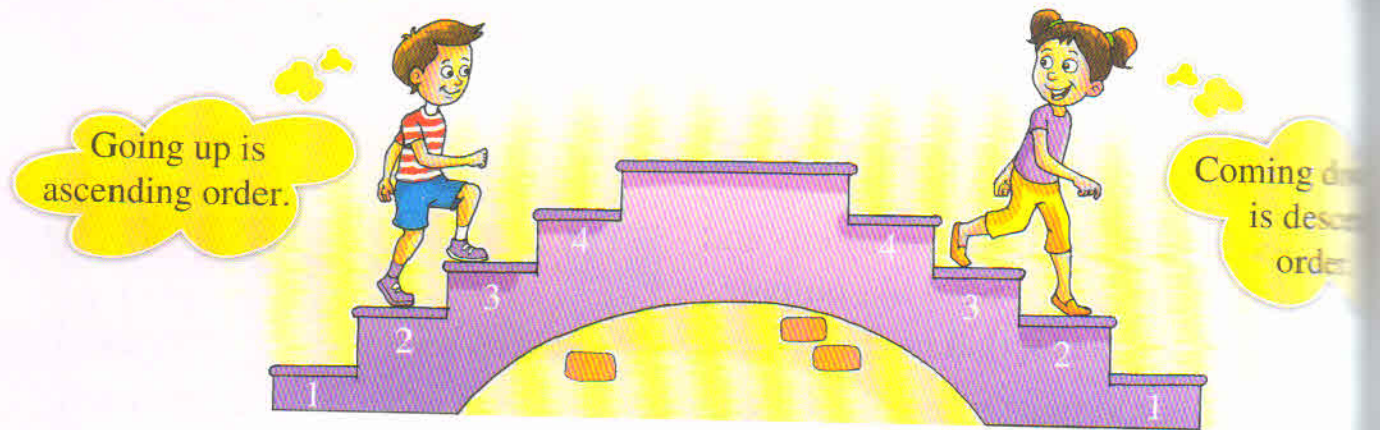
c.





## Ordering of Numbers

When numbers are arranged from the smallest to the greatest, they are said to be in ascending order. When numbers are arranged from the greatest to the smallest, they are said to be in descending order.



Let us arrange the numbers in ascending and descending order.

197 143 162 86 47

In these numbers, 197 is the greatest and 47 is the smallest, so ascending order of the given numbers is

47, 86, 143, 162, 197

Now arrange the given numbers in descending order.

Descending order is

197, 162, 143, 86, 47

### Exercise 1.4

1. Circle the greatest number.

- |        |     |     |        |     |     |
|--------|-----|-----|--------|-----|-----|
| a. 186 | 168 | 118 | b. 146 | 192 | 171 |
| c. 105 | 155 | 150 | d. 100 | 180 | 199 |



2. Circle the smallest number.

a. 146      106      164

b. 111      110      101

c. 138      183      109

d. 200      100      110

3. Fill in the blanks using  $<$ ,  $>$  or  $=$ .

a. 182 ..... 186

b. 160 ..... 106

c. 98 ..... 198

d. 49 ..... 109

e. 198 ..... 189

f. 107 ..... 107

4. Circle the correct sign. One has been done for you.

a. 329  $<$ ,  $>$ ,  $=$ , 441

b. 998  $<$ ,  $>$ ,  $=$ , 998

c. 864  $<$ ,  $>$ ,  $=$ , 378

d. 234  $<$ ,  $>$ ,  $=$ , 239

e. 757  $<$ ,  $>$ ,  $=$ , 767

f. 428  $<$ ,  $>$ ,  $=$ , 824

5. Arrange the following numbers in ascending order.

a. 42, 158, 93, 80

b. 75, 30, 10, 115

c. 113, 153, 188, 133

6. Arrange the following numbers in descending order.

a. 52, 148, 184, 111

b. 68, 168, 132, 123

c. 100, 37, 137, 173